

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Santa Clara Wastewater Treatment Plant Emergency Response - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IX**

Subject: **POLREP #2**
Santa Clara Wastewater Treatment Plant Emergency Response

Santa Paula, CA
Latitude: 34.3144538 Longitude: -119.1024780

To: Harry Allen, EPA Region 9
Kathleen Salyer, EPA Region 9
Enrique Manzanilla, EPA Region 9

From: Martin Powell, OSC

Date: 12/1/2014

Reporting Period: 11/24/2014 - 11/28/2014

1. Introduction

1.1 Background

Site Number:	A973	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	11/18/2014	Start Date:	11/18/2014
Demob Date:		Completion Date:	
CERCLIS ID:	CAN000900238	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

The incident began at approximately 3:30 am on November 18, when a vacuum truck exploded. Reports vary as to what activities lead up to the explosion (one suggested that the operator had begun aggregating wastes from totes at the facility into the vac truck). A fire ensued, eventually involving several waste streams, including oxidizers, acids, polymerizing agents, and possibly chlorine tablets. It is not clear what was in the vac truck when the explosion began. The secondary containment filled with a watery sludge from the mixed chemicals.

Almost immediately, fine crystals formed on the drying surfaces from the chemical mix; these were found to be shock sensitive, and the VCFD experienced a couple of incidents of sparks and small explosions from walking on the crystals. VCFD Haz Mat indicated that all tests on the crystals indicated an organic peroxide. VCFD and Santa Paula fire each abandoned one firefighting rig in the facility due to contamination with shock-sensitive organic peroxide. The Ventura County Sheriff conducted an evacuation out to a distance of one half mile and a shelter in place advisory was issued to residents located up to three miles downwind.

1.1.2.1 Location

815 Mission Rock Road, Santa Paula, CA 93060

1.1.2.2 Description of Threat

The fire has been extinguished, although a significant smoke plume/gas cloud was observed to leave the site.

The following inventory summarizes chemicals reported to be on the site prior to the fire. It is believed that other unknown chemicals were also present.

Common Name	Maximum Amount Onsite
motor oil	110 gallons
oxygen	1,000 cubic feet
acetylene	600 cubic feet
potassium permanganate	1,500 pounds
diesel fuel	500 gallons
320-L polymer	1,980 gallons
460-TC polymer	660 gallons
chlorine tablets	2,750 tablets
hydrogen peroxide	3,300 gallons
soda ash	3,300 gallons
sodium hypochlorite	990 gallons
aluminum chloride	1,650 gallons
anionic polymer	2,750 gallons
defoamer	110 gallons
emulsion breaker	110 gallons
ferric sulfate	3,300 gallons
sulfuric acid 93-99%	660 gallons
used motor oil	110 gallons
used motor oil filters	100 gallons

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Access to the facility has been limited due to health and safety concerns. Initial entries have been conducted by VCFD and Patriot Environmental.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

11-18-2014: EPA Personnel: START (2)

Phone duty officer Chris Weden tasked the START to mobilize to the site, which had suffered an explosion and fire early that morning. The Ventura County Fire Department (VCFD) had established a half mile evacuation zone around the site. The START reported to the Incident Command Post, which was established in the parking lot of the Santa Paula K-Mart, located at 895 Faulkner Road, Santa Paula, CA 93060. The ICP is three miles to the east-northeast of the site.

START provide technical support to VCFD and relayed information back to OSC Weden. As of 2000 hrs, the fire was mostly out; although steam was still emanating from the site from some exothermic reactions. There was a hazmat team on site, but VCFD wanted no work done at the site without adequate lighting.

11-19-2014: EPA Personnel: EPA (1), START (2)

Response activities continued in fire suppression and readiness mode. VCFD is continuing to provide the IC, however County Sheriff and Environmental Health are also in Unified Command. A one half-mile radius evacuation zone is still in effect as the threat of secondary fire and resulting chemical plume is still present.

VCFD Haz Mat conducted several entries of the adjacent businesses and animal shelter for the purposes of clearing the acute threat of shock-sensitive materials. In addition, VCFD conducted entries to the site.

EPA START provided technical assistance to the Incident Command. START participated in planning meetings to assist with the assessment of the shock sensitive material, as well as the emerging effort to identify agricultural fields that may have been affected by the plume during the fire. START conducted several benchtop tests of the shock-sensitive material from samples collected by VCFD. Benchtop tests include basic hazard classification and behavior tests to determine the threat of the material in both solid and liquid form. The results indicate a very strong oxidizer that is highly flammable in solid form. The smoke emitted from the combustion of the solid is also an oxidizer, presenting a significant dermal hazard.

OSC Dunkelman arrived onsite at 14:00 and integrated into the Command Structure, participating in numerous ICS meetings.

11-20-2014: EPA Personnel: EPA (1), START (3), ERRS (2)

Incident Command invited Patriot Environmental into the response to facilitate the transition from Emergency Response to Cleanup. Patriot devised an initial Entry Plan, and made their first entries into the exclusion zone. Patriot and their technical consultant, CTEH, began working on a plan to decontaminate equipment and neutralize the shock-sensitive oxidizer component of the waste. CTEH has submitted a perimeter air monitoring plan to the IC, and EPA is currently reviewing this plan.

The IC also elevated the assessment of the surrounding agricultural lands to a high level priority. Most of the lands down-gradient of the fire plume (to the west-southwest of the site) are food crops. EPA began coordinating with Ventura County Agricultural Commission personnel and began preparation of a sampling plan.

OSC Dunkelman continued to coordinate and support Incident Command staff.

ERRS personel delivered the mobile command post to the site. At the request of IC, ERRS personnel remained onsite to facilitate enforcement sampling of tanker trucks.

EPA ERT provided remote assistance to the response. Fred Stroud coordinated with outside agencies regarding potential impacts to agricultural lands and Phil Campagna consulted regarding neutralization/treatment of onsite waste.

11-21-2014: EPA Personnel: EPA(2), START (3), ERRS (2)

With the beginning of the transition from the emergency phase to the cleanup phase, OSC Dunkelman was elevated to an IC position within Unified Command. OSC Powell arrived onsite to support operations. EPA, Ventura County Agricultural Commission, VCFD, and CTEH (Patriot subcontractor), revised and executed a joint sampling effort in the agricultural lands down gradient of the site. The joint team collected soil samples at nineteen agricultural locations down-gradient (west) of the facility, as well as one background sample (east). The team also tested surfaces and soil at each location for pH and oxidizers. All twenty samples were submitted to a laboratory for analysis with a 24-hour turnaround. At the request of EPA, U.S. FDA and CA Department of Public Health arrived onsite, to evaluate the potential impact of site contaminant to nearby crops.

Patriot/CTEH prepared and submitted an Air Monitoring Plan in support of entry and future removal

operations. Perimeter air monitoring began at the site, and no compounds were identified above site action levels.

11-22-2014: EPA Personnel: EPA (2), START (2), ERRS (2)

The transition from the emergency phase to the cleanup phase continued. The IC staff, including OSC Dunkelman conducted a community briefing at 1100 hrs. Approximately 40 community members were present at the meeting.

Patriot began the process of decontaminating the VCFD fire engine abandoned at the entrance of the facility. The fire engine was decontaminated to the point where a rinsate from the hard surfaces tested below 0.5 ppm on oxidizer strips. The rig was moved onto the site for further decontamination. START personnel observed and document the decon process.

ERRS personnel continued to support sampling of tanker trucks, and demobed at the end of the day. Patriot has also submitted a Health and Safety Plan and an Environmental Sampling and Analysis Plan to the IC for review. IC is in the process of performing a review of the plan.

Patriot/CTEH continued perimeter air monitoring at the site; no compounds were detected above site action levels in the off-site areas.

Fire personnel demobed from the site, leaving EPA and Ventura County Environmental Health in Unified Command.

11/23-2014. EPA personnel: EPA (2), START (2)

The transition from the emergency phase to the cleanup phase was completed, with EPA, County Environmental Health and Patriot Environmental in Unified Command. OSC Powell replaced OSC Dunkelman as the EPA IC. OSC Dunkelman is continuing to support the response.

EPA and START began review of preliminary data from the soil sampling effort. START continued documentation efforts. Patriot continued decon of the fire engine, sampling of the facility and evaluation of the waste material.

11-24-2014 EPA personnel: EPA (2), START (2)

The stand-down order continued while Patriot/CTEH revised the HASP.

EPA participated in a conference call with agricultural stakeholder agencies (USFDA, Ventura County, State of California Department of Public Health) to discuss the soil data relevance and possible sampling steps to address agricultural concerns. The agricultural stakeholders will devise a plan and advisory statement to growers.

Patriot was allowed to enter the site in order to continue with decontamination of the Santa Paula fire engine. The cloth materials (seats, headliners, etc.) were removed and set aside as waste.

11-25-2014 EPA personnel: EPA (1), START (2)

Patriot prepared a soil/surface wipe (swipe sampling) screening plan to clear work areas, and delineate the exclusion zone at the site. Patriot also revised their Health and Safety Plan to address the comments that arose from the events leading to the near miss event on 11-23-2014. Patriot cleared the Contamination Reduction Zones and continued work on decontaminating the Santa Paula Fire Engine. Wipe samples were collected from the air filter within the fire engine and additional confirmation wipe samples were collected from the outside of the fire engine. Confirmation wipe sampling will continue throughout the staging zone tomorrow and air monitoring will be conducted within the cab of the fire engine to alleviate concerns regarding contaminants in the air conditioning/heating system.

11-26-2014 EPA personnel: EPA (1), START (1)

Patriot verifies the completion of swipe sampling on Engine 82. Swipes indicate that the interior and exterior of the truck is complete and the engine is ready for removal from the site. Santa Paula fire has been contacted and will setup removal of the engine when they can. Decon pads/pools have been setup at Decon Location "A" and Decon Location "C". Additional swipe samples are being collected by CTEH from the west and east portions of the site to aid in decision making on exclusion zone/support zone boundaries. Samples will be collected as described in the work plan submitted previously by CTEH. At this point, approximately ½ of the analytical samples collected from the site by CTEH have been shipped for analysis. The remainder will be shipped on Friday for results early next week.

11-27-2014 EPA Personnel: START (1)

CTEH has continued the collection of swipe samples from the west and east portions of the site. The sample results will be utilized to make decisions regarding the exclusion zone and support zones of the Site. CTEH/Patriot plans to submit a proposed map with updated Exclusion Zone areas and Support Zone areas by the end of the day. Patriot has setup a decon pool area to commence with personal vehicle decontamination tomorrow. The vehicles will be moved into the decon pool where they will be put through a decontamination process and then checked with swipe samples for pH and oxidizers. Patriot/CTEH submitted a "Release Area Stabilization Plan" which outlines planned procedures for the neutralization of oxidizers, the decontamination of trucks, and the solidification of the pool in the center of the site. Initial START comments were addressed and the official plan was submitted for approval in the evening.

Patriot proposed performing a "bench test" on the suspected peroxides on site tomorrow morning using a Sodium Sulfite solution as a neutralizer. The bench test results will be evaluated for implementation on a larger scale.

11-28-2014 EPA Personnel: EPA (2), START (2)

CTEH provided EPA with a site map which showed swipe results (pH and oxidizer) for the areas on the west and east portions of the Site. CTEH requested that the borders of the exclusion/support zones be reduced, based on data, to minimize the delineation of the impacted zone. EPA approved the written request. Patriot personnel made entrances to the east portion of the site (decon A) to setup pools for the decontamination procedures to be conducted on personal vehicles. At 0945, a CTEH sampling team consisting of 2 swipe sample technicians and 1 air monitoring technician were involved in a Flash Reactive incident while sampling. The team members, wearing level C PPE including tychem suits, were working in an area where they did not observe visible white powder. One sampler accidentally bumped a wooden wheelbarrow which set off a flash reaction which created a white flame and a percussive blast. The team immediately exited to the decon area where their PPE and clothes were removed and bagged for later investigation. The team members were not injured in the incident, but the PPE of one sample technician was breached by the flame.

Following the incident, all Patriot and CTEH personnel mobilized back to the command center and a stand-down was issued by Patriot. CTEH and Patriot continued internal meetings on-site for the remainder of the day.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Southern California Wastewater (aka Southern California Wastewater) is believed to be the owner/operator of the facility. Green Compass, is believed to be their parent company. Work at the site is being conducted by Patriot Environmental Services, who has provided EPA a copy of a Master Services Agreement. This agreement between Patriot Environmental Services and Southern California Waste Water is dated 11/18/2014. The following services are requested under this agreement: provide personnel equipment and materials to post fire cleanup at Mission Rock located as directed.

OSC Powell has provided verbal notice to the PRP's legal counsel on 11/24/2014, and to the PRP on 11/25/2014. A NFRA was issued to the Plant's Operation Manager on 11/26/2014. On 11/28/2014 the Plant's Operation Manager stated that the NFRA had been provided to the PRP. A signature memorializing receipt of NFRA has not been forthcoming to date.

2.1.4 Progress Metrics**2.2 Planning Section****2.2.1 Anticipated Activities**

Conduct all work in a safe manner
 Continue to evaluate contamination of the facility
 Continue to evaluate any offsite impacts
 Continue to decontaminate two fire engines
 Initiate cleanup of facility and treatment/disposal of waste material
 Continue to keep the community and response partners informed of site activities
 Prepare for rain event

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps

Continue site operations

2.2.2 Issues

Onsite contamination is extremely reactive. Onsite personnel (with support from offsite resources) are continuing to evaluate treatment/neutralization options which will render the material safe for disposal.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

2.5.2 Liaison Officer

2.5.3 Information Officer

EPA does not have a PIO onsite. Nahal Mogharabi is serving as the EPA PIO from a remote location and will provide onsite support if requested.

3. Participating Entities

3.1 Unified Command

PRP, EPA and Ventura County Environmental Health

3.2 Cooperating Agencies

Ventura County Fire
 Ventura County Sheriff
 Santa Paula Fire
 Ventura County Agricultural Commission
 U.S. Food and Drug Administration
 CA Department of Public Health, Food and Drug Branch
 CA OSHA

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.